

WHAT IS CLAIMED AS THE INVENTION IS:

1. A foam dispenser for use with a container containing soap or other liquid comprising:
 - 5 a rotary soap pump having a soap inlet and a soap outlet wherein the inlet is operably connectable to the container;
 - a rotary air pump having an air inlet and an air outlet;
 - a mixing chamber in flow communication with the air outlet and the soap outlet, the mixing chamber having an outlet;
 - 10 a porous membrane downstream of the mixing chamber, whereby an air and soap mixture that passes through the mixing chamber outlet passes through the porous membrane thereby producing foam; and
 - a drive means operably connected to the rotary soap pump and the rotary air pump.
- 15 2. A foam dispenser as claimed in claim 1 further including a one way valve positioned in the soap outlet.
3. A foam dispenser as claimed in claim 2 further including a one way valve positioned
20 in the air outlet.
4. A foam dispenser as claimed in claim 3 wherein the container is a collapsible

container and whereby the container collapses as liquid is pumped therefrom.

5. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump
are each lobe pumps.

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6. A foam dispenser as claimed in claim 5 wherein each lobe pump has a pair of
intermeshing tri-lobes.

7. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump
10 are each vane pumps.

8. A foam dispenser as claimed in claim 7 wherein each vane pump has a plurality of
vanes spaced around a drive wheel.

15 9. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump
are each gear pumps.

10. A foam dispenser as claimed in claim 9 wherein each gear pump has a drive gear
and a pump gear and wherein the drive gear is rotatable in the pump gear.

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11. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump
are each peristaltic pumps.

12. A foam dispenser as claimed in claim 11 wherein each peristaltic pump has a flexible tube and a peristaltic drive wheel and the peristaltic drive wheel engages the flexible tube.
- 5 13. A rotary foam dispenser for producing and dispensing foam comprising:
 a container for containing a liquid;
 a rotary soap pump having a soap inlet and a soap outlet wherein the inlet is operably connectable to the container;
 a rotary air pump having an air inlet and an air outlet;
10 a mixing chamber in flow communication with the air outlet and the soap outlet having an outlet;
 a porous membrane downstream of the mixing chamber, whereby an air and soap mixture that passes through the mixing chamber outlet passes through the gauze thereby producing foam;
- 15 a drive means operably connected to the rotary soap pump and the rotary air pump; and
 a housing having an interior and the container, the soap pump, the air pump, the mixing chamber are housed within the housing interior.
- 20 14. A rotary foam dispenser as claimed in claim 13 further including a one way valve positioned in the soap outlet.

15. A rotary foam dispenser as claimed in claim 14 further including a one way valve positioned in the air outlet.

16. A rotary foam dispenser as claimed in claim 15 wherein the container is a
5 collapsible container and whereby the container collapses as liquid is pumped
therefrom.

17. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air
pump are each lobe pumps.

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18. A rotary foam dispenser as claimed in claim 17 wherein each lobe pump has a pair
of intermeshing tri-lobes.

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19. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air
pump are each vane pumps.

20. A rotary foam dispenser as claimed in claim 20 wherein each vane pump has a
plurality of vanes spaced around a drive wheel.

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21. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air
pump are each gear pumps.

22. A rotary foam dispenser as claimed in claim 21 wherein each gear pump has a drive gear and a pump gear and wherein the drive gear is rotatable in the pump gear.
23. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air pump are each peristaltic pumps.
24. A rotary foam dispenser as claimed in claim 23 wherein each peristaltic pump has a flexible tube and a peristaltic drive wheel and the peristaltic drive wheel engages the flexible tube.

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